

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1 and 2 (Cancelled).

3(Previously presented). The method according to claim 18, wherein the binding motif sequence for a protein having a nuclear transport signal is a binding motif sequence for a transcription factor.

4(Previously presented). The method according to claim 18, wherein the DNA has a modified nucleotide, wherein the modified nucleotide is selected from the group consisting of a methylated ribonucleotide, a sulfurized deoxyribonucleotide and an LNA.

Claims 5-6 (Cancelled).

7(Previously presented). The method according to claim 18, wherein the target nucleic acid is a nucleic acid located in cytoplasm.

8(Previously presented). The method according to claim 18, wherein the target nucleic acid is a nucleic acid located in nucleus.

9(Previously presented). The method according to claim 18, wherein a plurality of mutations are simultaneously introduced into the target nucleic acid.

10(Previously presented). The method according to claim 18, wherein the mutation to be introduced into the target nucleic acid is substitution, deletion and/or insertion of a nucleotide.

Claims 11-16 (Cancelled).

17(Currently amended). A method for introducing a mutation into a nucleotide sequence of a target nucleic acid, comprising:

(1) preparing a double-stranded DNA ~~having which~~ consists of an inverted repeat sequence consisting of a sense strand sequence and an antisense strand sequence of a target nucleic acid and containing a mutation to be introduced into the target nucleic acid, wherein:

the sense strand sequence and the antisense strand sequence are arranged in tandem, and the mutation to be introduced into the target nucleic acid is located within the sense strand sequence and the antisense strand sequence in the inverted repeat sequence;

a spacer may optionally be inserted between the sense strand sequence and the antisense strand sequence; and

said DNA is prepared by excising an inverted repeat DNA insert from a plasmid containing an inverted repeat DNA insert in which two identical genes or fragments thereof are arranged in opposite directions, or by amplifying said inverted repeat DNA using said plasmid as a template; and

(2) transferring the DNA prepared in step (1) into a cell without denaturation.

18(Currently amended). A method for introducing a mutation into a nucleotide sequence of a target nucleic acid, comprising:

(1) preparing a double-stranded DNA ~~having~~ which consists of an inverted repeat sequence consisting of a sense strand sequence and an antisense strand sequence of a target nucleic acid and containing a mutation to be introduced into the target nucleic acid, wherein the sense strand sequence and the antisense strand sequence are arranged in tandem, and the mutation to be introduced into the target nucleic acid is located within the sense strand sequence and the antisense strand sequence in the inverted repeat sequence, and wherein a

spacer may optionally be inserted between the sense strand sequence and the antisense strand sequence, and

a binding motif sequence for a protein having a nuclear transport signal, wherein said DNA is prepared by excising an inverted repeat DNA insert from a plasmid containing an inverted repeat DNA insert in which two identical genes or fragments thereof are arranged in opposite directions, or by amplifying said inverted repeat DNA using said plasmid as a template; and

(2) transferring the DNA prepared in step (1) into a cell without denaturation.

19(Previously presented). The method according to claim 18, wherein said DNA is prepared by excising the inverted repeat sequence from a plasmid containing said inverted repeat sequence as an insert, utilizing sites for restriction enzyme(s) at both ends of the insert in the plasmid.

20(Previously presented). The method according to claim 18, wherein said DNA is prepared by PCR using as a template a plasmid containing said inverted repeat sequence.

21(Previously presented). The method according to claim 17, wherein the DNA has a modified nucleotide, wherein

the modified nucleotide is selected from the group consisting of a methylated ribonucleotide, a sulfurized deoxyribonucleotide and an LNA.

Claims 22-23 (Cancelled).

24(Previously presented). The method according to claim 17, wherein the target nucleic acid is a nucleic acid located in cytoplasm.

25(Previously presented). The method according to claim 17, wherein the target nucleic acid is a nucleic acid located in nucleus.

26(Previously presented). The method according to claim 17, wherein a plurality of mutations are simultaneously introduced into the target nucleic acid.

27(Previously presented). The method according to claim 17, wherein the mutation to be introduced into the target nucleic acid is substitution, deletion and/or insertion of a nucleotide.